



**Learning Management System
Publishing AICC and SCORM
Courses in Lectora[®]**



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INTRODUCTION

This document is presented to support GeoLearning clients in uploading Lectora® created courses using the Course Upload Tool in your Learning Center.

SETTING UP SCORM AND AICC COURSES

To make sure your course functions properly in a SCORM environment there are a couple actions you must perform prior to publishing the course. These actions can be performed at any time in the courseware creation process prior to publishing the course.

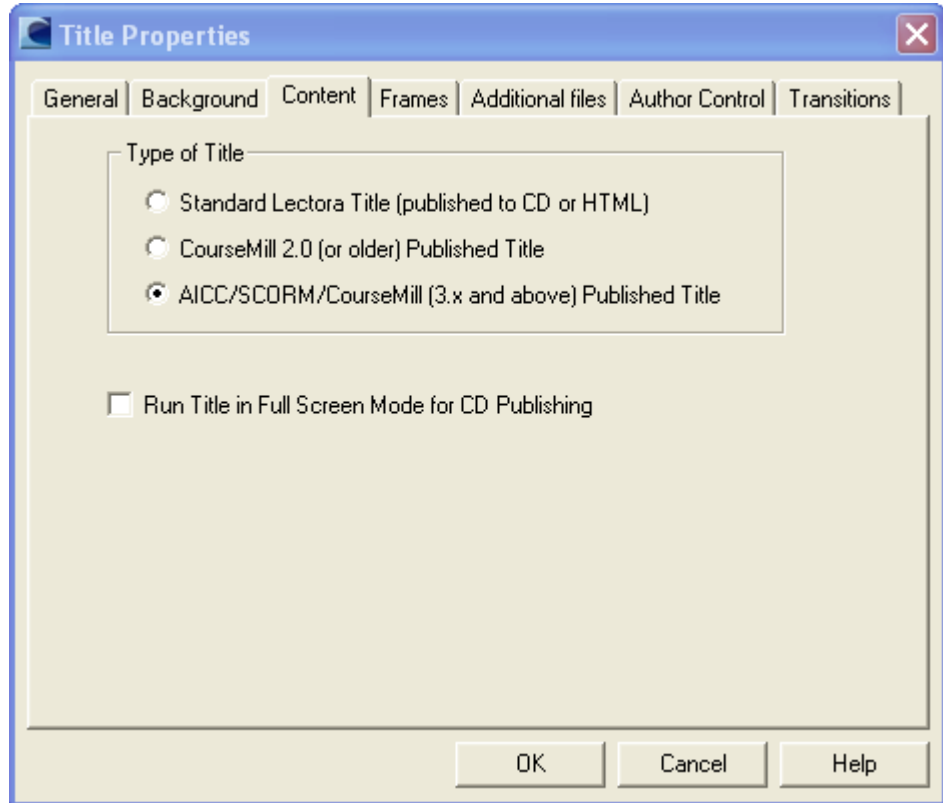
The first step is to set your course up as an “AICC/SCORM/CourseMill” content type.


1. Open your course in Lectora®. Please refer to the online documentation for assistance in creating a course.
2. Right click on the Course Title icon 
3. From the menu, select Properties and click on the Content Tab.

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4. In the Content Tab change Type of Title to AICC/SCORM/CourseMill and click OK.



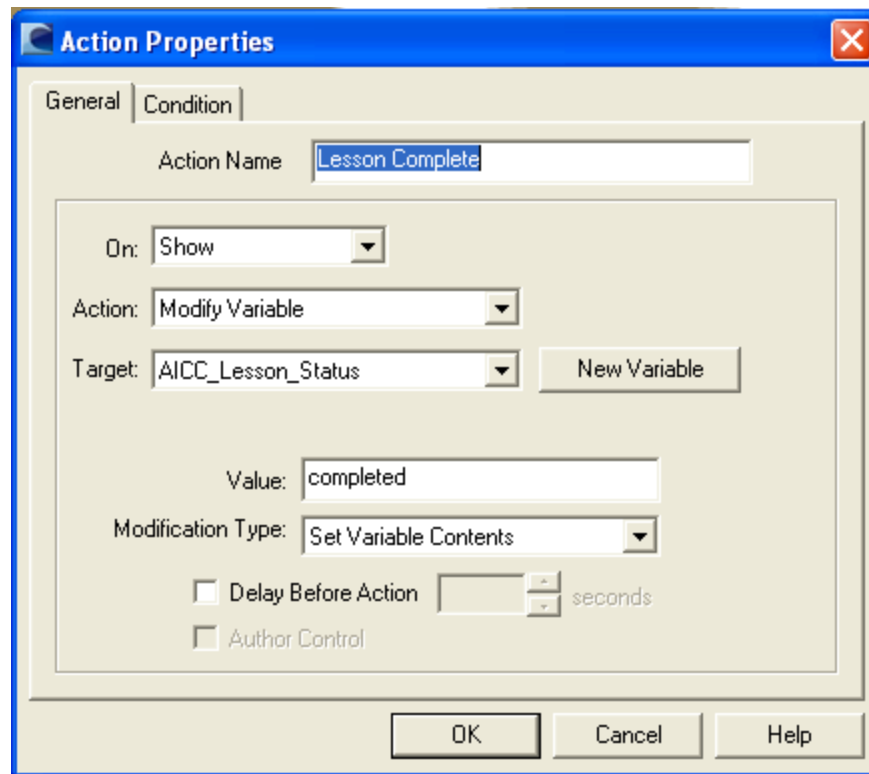
5. An icon labeled "AU" will be created. Right click on the  icon.
6. Once in the Assignable Unit Properties, you will want to adjust a number of items.
 - a. In the General section, change the AU name to the name of the course. Adjust the Page Size in Screen Pixels to your desired size or click on the Use Default choice.
 - b. In the Assignable Unit Properties section, adjust the Description and Mastery Score as desired. The Mastery score should match the lowest passing score in your course assessment properties. We recommend that you set this to something about 70%.
 - c. Click OK

Now that the course has been set up, the next step is adding a completion action. This action will tell the LMS that once a user has achieved the specified criteria, the course should be marked as completed. When adding this action into your course, you should pick the screen which corresponds with a successful course completion. There are many ways to accomplish the actions listed below, but this represents our recommended approach.

1. After locating your “successful completion screen,” right click on the screen icon and choose New -> Action.
2. In the Action Properties General screen you will make a number of adjustments.
 - a. Change the **Action Name** to “Lesson Completed”.
 - b. Set **On** to “Show”
 - c. Set **Action** to “Modify Variable”
 - d. Set **Target** to “AICC_Lesson_Status”
 - e. Set **Value** to “completed”.

Note: This must NOT include quotes or capital letters.

 - f. Set **Modification Type** to “Set Variable Contents”



3. In the Action Properties Condition screen you may want to adjust the settings so a completed status is not achieved unless another condition is met. Whether you choose to change this will depend on your course design.
4. Last, you need to create an exit action. One way is to right click on the same page and then select add New -> Object -> Button.
 - a. Once in the Button Properties click on the “On Click” tab. Set the **Action** to “Exit Title/Close Window”.

Creating Courses with Larger Window Sizes

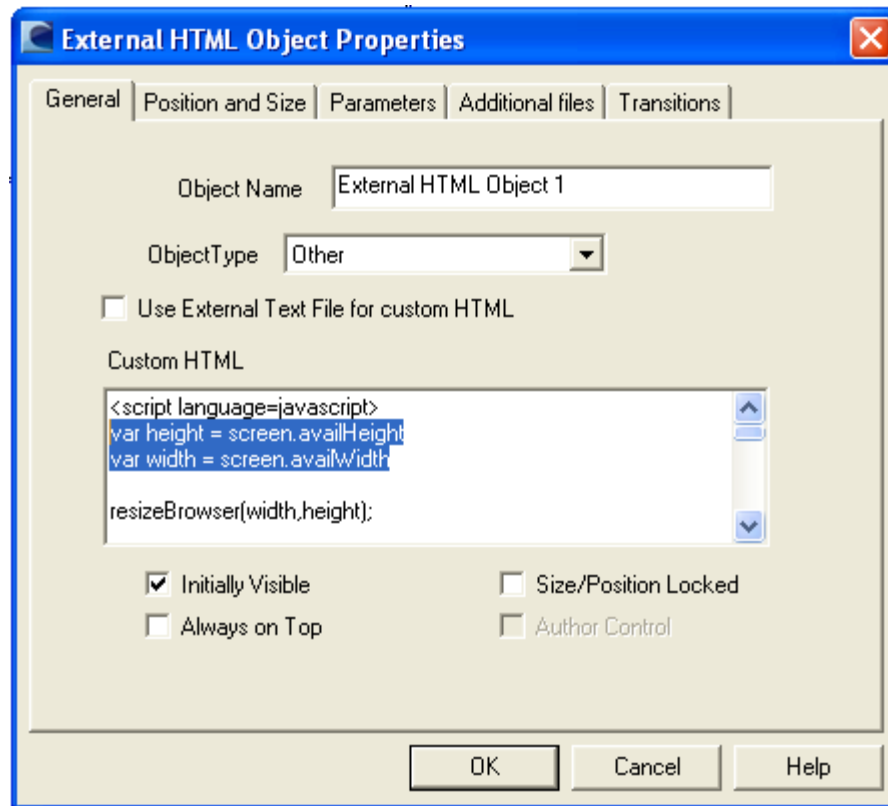
By default your course will launch in a standard 800x600 window size. For your course design this may not be the most appropriate size. You might have end users with 1024x768 screens or larger and need to create content that utilizes more screen space without necessitating scroll bars. To accomplish this you will

need to add some JavaScript code to your course. Don't worry though, adding it is quite simple.

1. Once your course is open, right click on the Course Title and select New->Object->External HTML.
2. Rename the **Object Name** to "Screen Resize".
3. Set **Object Type** to ""Other".
4. In the **Custom HTML** section copy or paste the JavaScript text into the dialogue box (see **JavaScript Screen Resize Text**)
5. This text will resize your course window to the maximal available resolution on each person's individual computer. While this may work in some cases, in others you will want to specify a certain size. To set the resize command to a 1024x768 for all users, change lines 2 and 3 of the JavaScript text to the following:
 - a. `var height = 768`
 - b. `var width = 1024`
6. Once you have made the necessary adjustments, click on OK. These changes will work in the published version of the course.

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Note: Checking Initially Visible is an optional choice. When the course is published the script will not be displayed even if this option is checked.

JavaScript Screen Resize Text

```
<script language=javascript>
var width = 800
var height = 600

resizeBrowser(width,height);
centerBrowser(width);

function resizeBrowser(targetWidth,targetHeight){

if (parseInt(navigator.appVersion)>3) {
if (navigator.appName=="Netscape") {
availableWidth = window.innerWidth-16;
availableHeight = window.innerHeight-16;
```

```
}  
if (navigator.appName.indexOf("Microsoft")!=-1) {  
    availableWidth = document.body.offsetWidth-20;  
    availableHeight = document.body.offsetHeight-20;  
}  
}  
  
var diffWidth = targetWidth - availableWidth  
var diffHeight = targetHeight - availableHeight  
top.resizeBy(diffWidth, diffHeight);  
  
}  
  
function centerBrowser(targetWidth){  
    var screenPosX = ((screen.availWidth - targetWidth)/2);  
    var screenPosY = 0;  
    top.moveTo(screenPosX, screenPosY);  
}
```

</script>

Note: This sample with slightly different code can also be found at:

<http://knowledgebase.trivantis.com/faqDspItem.asp?faqid=93> (the sample here does not work with FireFox)

Adding Streaming Video

When adding video files to your course you should make sure that all individual video files are less than 2MB in size. If they are larger than this, these videos should be placed on a streaming server.

GeoLearning can provide you with streaming server hosting services if you do not already have this ability. *(There are additional fees for this service based*

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upon size, usage, and security. Please contact your account manager for pricing.)

The instructions provided below are based on you sending a Windows Media Video File (WMV) to GeoLearning and GeoLearning providing you with URL or location information, so please keep this in mind when using the examples.

Unsecure Video

In most cases it is not necessary to have a secure streaming server to stream your video content. While technically a user could obtain access to your video, this would require they correctly guess the URL and associated information.

Adding a streaming video to your Lectora course is fairly simple.

1. At the desired page select New -> Object -> Video
2. Add a name for your video
3. Select Windows Media Services Streaming Video
4. In the URL add the URL provided to you by GeoLearning

a. E.g.,

mms://geolearn.wmod.llnwd.net/a1117/o16/c/name/video.wmv

5. Select the desired checkboxes and options and then click on OK

At this point if you have entered the information the video will play successfully in your published course.

Secure Video: Media Vault

Security for streaming servers can operate on many levels. The GeoLearning hosted streaming service utilizes MediaVault. This tool will generate a dynamic URL that will become active upon generation and will expire shortly thereafter as well as verify the URL generation came from an approved server, thus preventing misuse.

Once you have provided the streaming video files to GeoLearning, you will be given a file path location for each of your videos:

e.g., acmecopresident.wmv

This information will be used when adding the videos to your course.

Adding this type of video requires a couple additional steps:

1. First locate the page for the video and then select New -> Object -> External HTML
2. In Object Name enter the name of your video
3. In ObjectType select *Other*
4. In the Custom HTML dialogue box enter the following information
 - a. `<IFRAME height="420" width="410" src="http://component.geolearning.com/securevideostreaming/secureform.aspx?object=folderName/videoFile.wmv&playerHeight=400&playerWidth=400&showControls=1&autoStart=1" frameborder="0" scrolling="no"></IFRAME>`
 - b. There are 7 items that you will want to review and potentially adjust in this line:
 - i. The **height** variable should be set to the pixel height of your movie + 20. So a movie that had a height of 400 would be set to 420 for the height variable.
 - ii. The **width** variable should be set to the pixel width of your movie + 10. So a movie that had a width of 400 would be set to 410 for the width variable.
 - iii. The **object** variable should be set to the video path and name that GeoLearning provides you. In other words, replace *folderName/videoFile.wmv* with the information GeoLearning provided you after the videos were loaded on the streaming server.

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1. e.g., acme/president.wmv
 - iv. The **playerHeight** variable should be set to the pixel height of your video.
 - v. The **playerWidth** variable should be set to the pixel width of your video.
 - vi. The **showControls** variable should be set to 0 if you do NOT want the video player controls to be displayed.
 - vii. The **autoStart** variable should be set to 0 if you do NOT want the video to automatically start.
5. Next, click on the **Position and Size** tab and then set the height and width settings to the same number you specified in the previous step for height and width variables. These will be the numbers that are 20 and 10 pixels larger than your video size.
 6. Click on OK and then Publish your project.
 7. To view the video you **MUST** upload it your LMS first. If you do not, the course will play, but the video stream will not display due to the security restrictions.

PUBLISHING SCORM COURSES

1. Open your course in Lectora®. Please refer to the online documentation for assistance in creating a course.
2. In the **Publish** menu, select **Publish to SCORM/Web-Based**.
 - a. If any errors were found in your course they will be listed in red.
You will need to fix the errors before you can publish.
3. Click the **Publish** button.
4. The **Publish SCORM Location** dialog box will open. Enter the following information on the **SCORM Options tab**:
 - a. **Course Is:** we recommend you select SCORM 1.2 Conformant.
 - SCORM 1.1 is also an option.
 - SCORM 1.0 and SCORM 2004 are not compatible with the Learning Center.
 - b. **Course Creator:** Type the name you wish to display as the creator of the course material.
 - Note this is a required field, but it will not be passed to the Learning Center when you upload.
 - It is recommended to type the same name as you will use when uploading the course into the Learning Center.

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c. **Course ID:** Type the ID of the course.

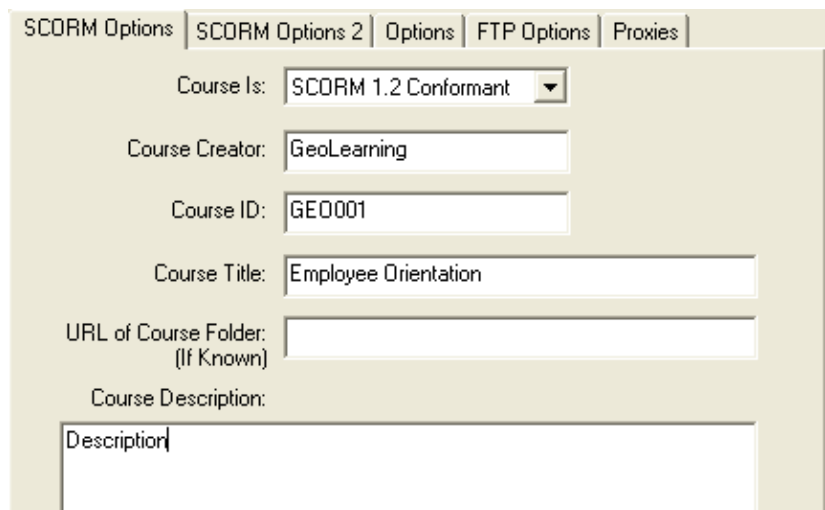
- Note this is a required field, but it will not be passed to the Learning Center when you upload.
- It is recommended to type the same ID you will use when uploading the course into the Learning Center.

d. **Course Title:** Type the title of the course.

- This course title will be the name of the course in the Learning Center once it is uploaded.
- By default the name of the course will be displayed. It is recommended to keep this as the course title. This way the zip file that you upload is named the same as the course in the Learning Center.

e. **Course Description:** Type a very brief description of the course's content.

- Note this is a required field, but you can leave it with the default text. The information will not be passed to the Learning Center when you upload.



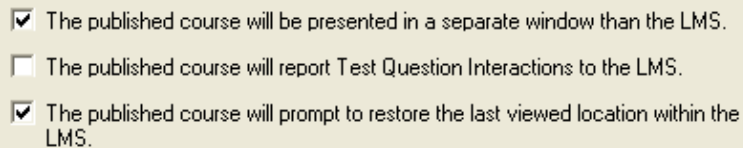
The screenshot shows a web form with several tabs at the top: "SCORM Options", "SCORM Options 2", "Options", "FTP Options", and "Proxies". The "Options" tab is selected. The form contains the following fields:

- Course Is:** A dropdown menu with "SCORM 1.2 Conformant" selected.
- Course Creator:** A text input field containing "GeoLearning".
- Course ID:** A text input field containing "GEO001".
- Course Title:** A text input field containing "Employee Orientation".
- URL of Course Folder (If Known):** An empty text input field.
- Course Description:** A text area with the placeholder text "Description".

f. To automatically close the content window when exiting the course, check "**The published course will be presented in a**

separate window than the LMS” checkbox. This is **highly** recommended.

- g. Check/Uncheck **“The published course will report Question and Test Interactions to LMS”** checkbox.
- GeoMaestro 4x does not support this feature.
 - If you are using *GeoMaestro 5x* and *SCORM*, you can check this option to track individual test items.
- h. To enable the automatic book-marking feature, check **“The published course will prompt to restore the last viewed location within the LMS”** checkbox.

- 
- A screenshot of a settings panel with a light beige background. It contains three checkboxes with corresponding text:
- The published course will be presented in a separate window than the LMS.
 - The published course will report Test Question Interactions to the LMS.
 - The published course will prompt to restore the last viewed location within the LMS.

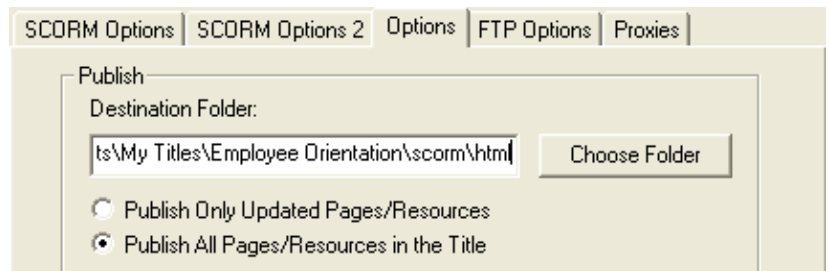
8. Click the **Options** tab, complete the following:

- a. **Destination Folder:** choose a local folder where your HTML files will be published.
- b. Select the desired publishing feature:
- **Publish Only Updated Pages/Resources:** publish only the pages/resources that have been updated since last published.

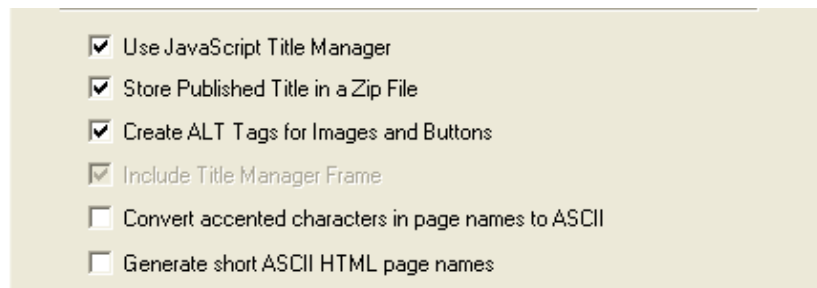
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- **Publish All Pages/Resources in the Title:** publish all the pages/resources regardless of whether they have been updated or not.



- c. Keep the defaults on the checkboxes. If you would like more information on these options please use the online help in Lectora.



9. Click the **OK** button. The Publish dialog box will convert your files to HTML in the local folder specified above.
10. Click the **Done** button.
11. Upload the zip packaged to your LMS and test.

PUBLISHING AICC COURSES

GeoMaestro LMS supports both SCORM and AICC standards. In some cases you may wish to upload your course in AICC format. If you choose to use AICC format you must follow the steps provided here in order to ensure your course launches and tracks properly.

1. Open your course in Lectora®. Please refer to the online documentation for assistance in creating a course.
2. Make sure you follow the appropriate steps in the **Setting up SCORM and AICC Courses** section of this guide.
3. In the **Publish** menu, select **Publish to AICC/Web-Based**.
 - a. If any errors were found in your course they will be listed in red.
You will need to fix the errors before you can publish.
4. Click the **Publish** button.

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5. The **Publish AICC Location** dialog box will open. In the **AICC Options** tab you will need to make a few changes:

Publish AICC Location

AICC Options | Options | FTP Options | Proxies | Compression

Course Creator: CourseCreator

Course ID: CourseID

Course Title: history of kites

URL of Course Folder:
(If Known)

Course Description:
Course Description Goes Here

The published course will reside on the same network server as the LMS.
Cross-domain redirector URL:

The published course will be presented in a separate window than the LMS.

The published course will report Test/Survey Question Interactions to the LMS.

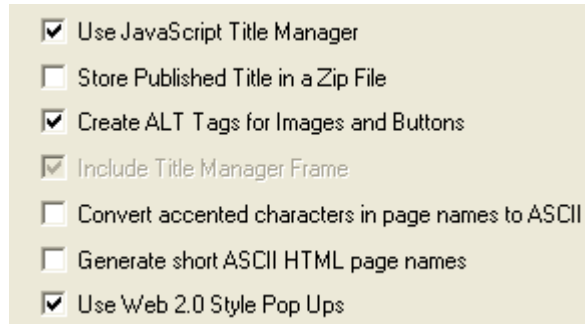
The published course will prompt to restore the last viewed location within the LMS.

OK Cancel Help

- a. **Course Creator:** Type the name you wish to display as the creator of the course material.
 - i. Note this is a required field, but it will not be passed to the Learning Center when you upload.
 - ii. It is recommended to type the same name as you will use when uploading the course into the Learning Center.

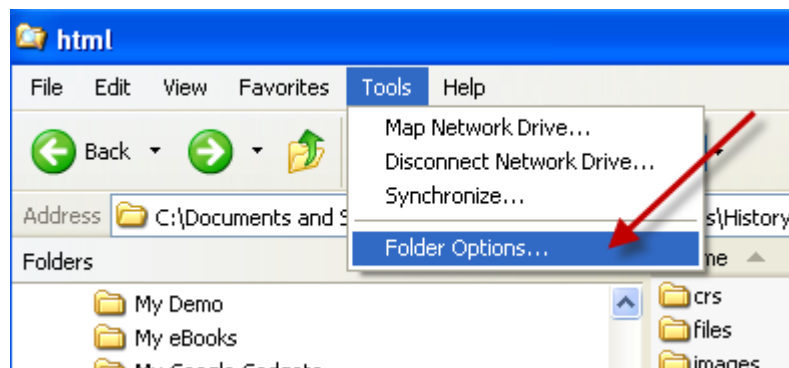
-
- b. **Course ID:** Type the ID of the course.
 - i. It is recommended to type the same ID you will use when uploading the course into the Learning Center.
 - c. **Course Title:** Type the title of the course.
 - i. This course title will be the name of the course in the Learning Center once it is uploaded.
 - ii. By default the name of the course will be displayed. It is recommended to keep this as the course title. This way the zip file that you upload is named the same as the course in the Learning Center.
 - d. **Course Description:** Type a very brief description of the course's content.
 - i. Note this is a required field, but you can leave it with the default text. The information will not be passed to the Learning Center when you upload.
 - e. AICC courses can be published on different networks. In this case, check "**The published course will reside on the same network server as the LMS**" checkbox.
 - f. To automatically close the content window when exiting the course, check "**The published course will be presented in a separate window than the LMS**" checkbox. This is **highly** recommended, but may not be required in your environment. Please test if you do not use the recommended option.
 - g. Uncheck "**The published course will report Question and Test Interactions to LMS**" checkbox.
 - i. Currently the Learning Center will not support this feature.

please use the online help in Lectora.



12. Click the **OK** button. The Publish dialog box will convert your files to HTML in the local folder specified above.
13. Click the **Done** button.
14. Lectora publishes some necessary AICC files in a folder called CRS in the published course folder. To load your Lectora AICC course into GeoMaestro you will need to make some modifications to these files before loading your AICC package.
 - i. Access the folder you published your AICC course to, and locate the file with the extension “.au”. If you have extensions turned off in Windows you may need to turn them on to more easily locate this file.

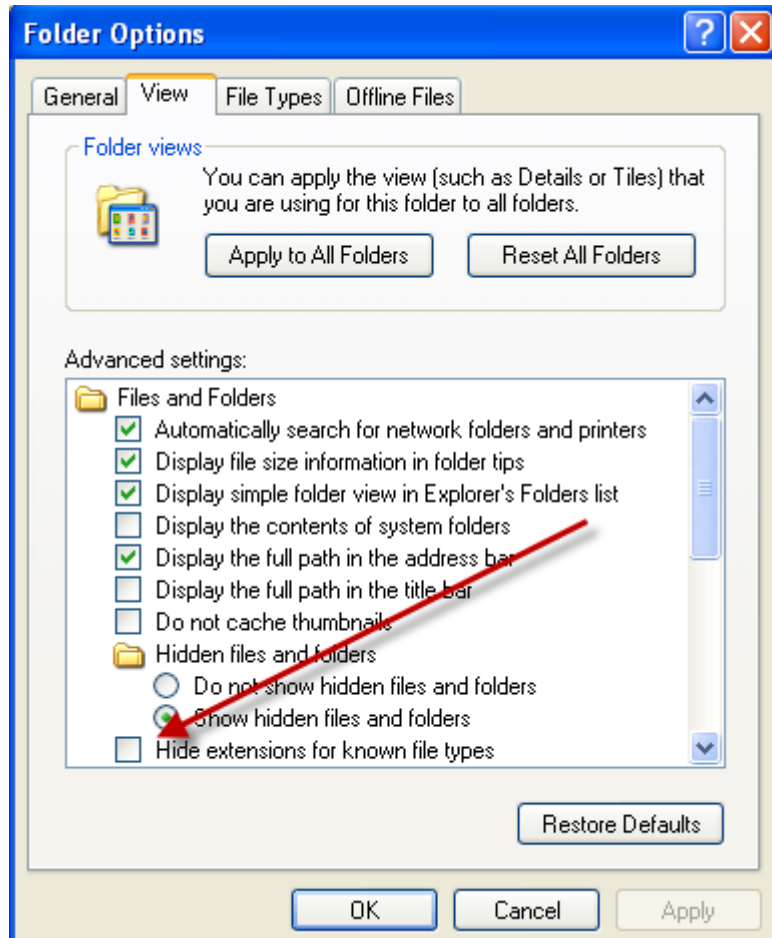
To turn on the display of extension, open Windows Explorer and select Tools ->Folder Options



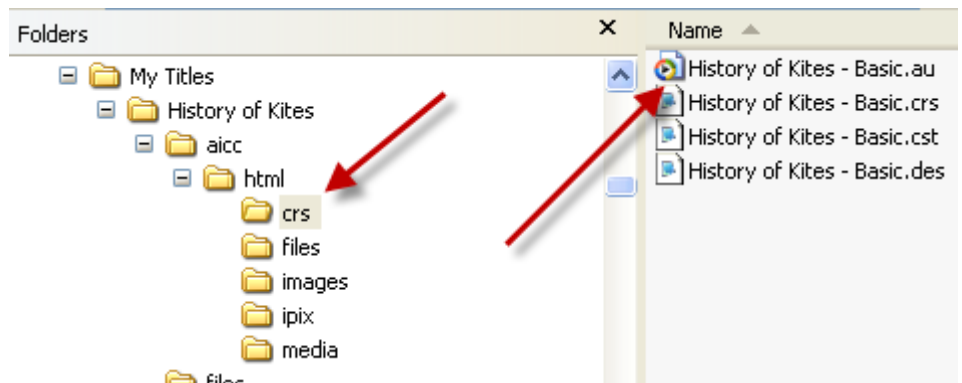
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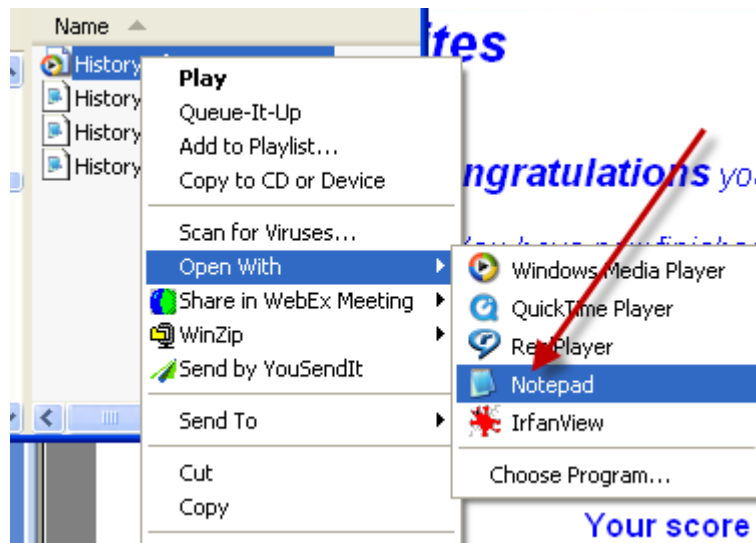
Click on the View tab and uncheck the “Hide extensions for known file types” option. Click on Ok and the extensions will now appear.



The file you are looking for is located in the crs folder



- ii. You must now make a small edit to this file. To edit this file right click on the file and choose **Open with** and then select **Notepad**. Alternatively you may have to launch **Notepad** first and then open the file from within **Notepad** if the **Open with** option is not available on your computer.

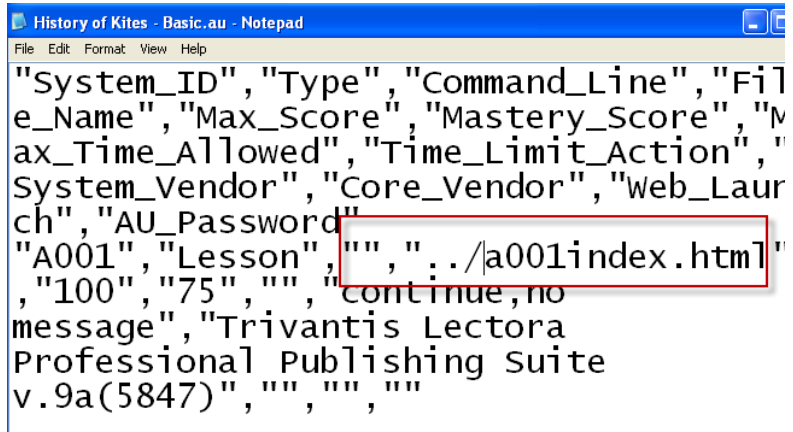


Once the file is open, look through the 3-4 lines of text and locate the starting HTML file. Alternatively you may want to use the search functionality in **Notepad** to search for “html” to more easily locate this text.

It will be the only html file name in the code. In the sample below it is *a001index.html*.

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```
History of Kites - Basic.au - Notepad
File Edit Format View Help
["System_ID", "Type", "Command_Line", "File_Name", "Max_Score", "Mastery_Score", "Max_Time_Allowed", "Time_Limit_Action", "System_Vendor", "Core_Vendor", "Web_Launch", "AU_Password", "A001", "Lesson", "", "", "../a001index.html", "100", "75", "", "continue, no message", "Trivantis Lectora Professional Publishing Suite v.9a(5847)", "", "", ""]
```

Now that you have located the file, remove the “../” that is in front of the file. In the example above it will be changed from “../a001index.html” to “a001index.html”.

Exit **Notepad** and save the file you modified.

- iii. If you are using GeoMaestro 5x, zip the contents of the course including all directories and the recently modified file. Do **NOT** include the course folder in the zip file. The zip **MUST** have the main course contents at the root of the zipped file.
 - iv. Upload the zip package to your LMS and then test.
- **NOTE:** *GeoMaestro 4x users, in addition to the previous steps you must also:*
 - i. Copy all 4 AICC files located in the CRS folder into the root directory of your course.
 - ii. Rename the 4 files in the AICC package. Rename your *.des, *.cst, *.crs, and *.au files to hacp.des, hacp.cst, hacp.crs, and hacp.au respectively. It will not matter what their names were

before, the names you rename them to will always be the same.

Zip up the package and upload the zipped package to your LMS. When uploading the package, specify the type as AICC HACP and then test.

Features

- The zip file that is created when you publish is what you will upload into the Learning Center. Please refer to the Course Upload Tool documentation for instructions.
- The course structure files will be created in a sub-directory of where your title resides called XML (if you published to SCORM).
- For SCORM courses, the IMS Content Packaging manifest (imsmanifest.xml) will be created in the HTML folder. The manifest will contain the first page of the course along with each page and the dependencies of each page.
- Validates course materials for compliance with the SCORM or AICC standards.
- Allows production of content that is either AICC, SCORM 1.0, SCORM 1.1, SCORM 1.2, or SCORM 2004 conformant. Remember that only AICC or SCORM 1.2 can be loaded into the Learning Center.

Restrictions

- Only tests that can be scored may be included in a course. This necessitates that Short Answer and Essay questions are excluded from all tests.
- Standalone questions are still permitted within the course.
- Multiple tests may be included in the course. The sum of all test scores represents the maximum score for the course.
- A course must contain at least one Exit Title action. See Adding Actions for more information.
- A course may contain no tests, but then the score for the course will be automatically set to 100 on any page where the Exit Title action resides.

